

# Everyday Mathematics Goals

## Grade 1

Everyday Mathematics goals are organized here by content strand. Program Goals are shown in bold face. Numbered goals are specific to first grade.

### Number and Numeration

#### **Understand the meanings, uses, and representations of numbers**

- Goal 1: Count on by 1s, 2s, 5s, and 10s past 100 and back by 1s from any number less than 100 with and without number grids, number lines, and calculators
- Goal 2: Count collections of objects accurately and reliably; estimate the number of objects in a collection
- Goal 3: Read, write, and model with manipulatives whole numbers up to 1,000; identify places in such numbers and the values of the digits in those places
- Goal 4: Use manipulatives and drawings to model halves, thirds, and fourths as equal parts of a region or a collection; describe the model
- Goal 5: Use manipulatives to identify and model odd and even numbers

#### **Understand equivalent names for numbers**

- Goal 6: Use manipulatives, drawings, tally marks, and numerical expressions involving addition and subtraction of 1- or 2-digit numbers to give equivalent names for whole numbers up to 100

#### **Understand common numerical relations**

- Goal 7: Compare and order whole numbers up to 1,000

## **Operations and Computation**

### **Compute accurately**

- Goal 1: Demonstrate proficiency with  $+/-0$ ,  $+/-1$ , doubles, and sum-equals-ten addition and subtraction facts such as  $6+4=10$  and  $10-7=3$
- Goal 2: Use manipulatives, number grids, tally marks, mental arithmetic, and calculators to solve problems involving the addition and subtraction of 1-digit whole numbers with 1- or 2- digit whole numbers; calculate and compare the values of combinations of coins

### **Make reasonable estimates**

- Goal 3: Estimate reasonableness of answers to basic fact problems (e.g. Will  $7+8$  be more or less than 10?)

### **Understand meanings of operations**

- Goal 4: Identify change-to-more, change-to-less, comparison, and parts-and-total situations

## **Data and Chance**

### **Select and create appropriate graphical representations of collected or given data**

- Goal 1: Collect and organize data to create tally charts, tables, bar graphs, and line plots

### **Analyze and interpret data**

- Goal 2: Use graphs to answer simple questions and draw conclusions; find the maximum and minimum of a data set.

### **Understand and apply basic concepts of probability**

- Goal 3: Describe events using certain, likely, unlikely, impossible and other basic probability terms

## **Measurement and Reference Frames**

**Understand the systems and processes of measurement; use appropriate techniques, tools, units, and formulas in making measurements**

- Goal 1: Use nonstandard tools and techniques to estimate and compare weight and length; measure length with standard measuring tools.
- Goal 2: Know and compare values of pennies, nickels, dimes, quarters, and dollar bills; make exchanges between coins.

**Use and understand reference frames**

- Goal 3: Identify a thermometer as a tool for measuring temperature; read temperatures on Fahrenheit and Celsius thermometers to the nearest 10 degrees.
- Goal 4: Use a calendar to identify days, weeks, months, and dates; tell and show time to the nearest half and quarter hour on an analog clock.

## **Geometry**

**Investigate characteristics and properties of two- and three- dimensional geometric shapes**

- Goal 1: Identify and describe plane and solid figures including circles, triangles, squares, rectangles, spheres, cylinders, rectangular prisms, pyramids, cones, and cubes.

**Apply transformations and symmetry in geometric situations**

- Goal 2: Identify shapes having line symmetry; complete line-symmetric shapes or designs.

## **Patterns, Functions, and Algebra**

### **Understand patterns and functions**

Goal 1: Extend, describe, and create numeric, visual, and concrete patterns; solve problems involving function machines, “What’s My Rule?” tables, and Frames-and-Arrows diagrams.

### **Use algebraic notation to represent and analyze situations and structures**

Goal 2: Read, write, and explain expressions and number sentences using the symbols  $+$ ,  $-$ , and  $=$  and the symbols  $>$  and  $<$  with cues; solve equations involving addition and subtraction.

Goal 3: Apply the Commutative Property of Addition and the Additive Identity to basic addition fact problems.